applying a top side dicing tape to the top surface;

grinding the wafer at a bottom surface opposite the top surface and thereby laying open the trenches;

applying a protective material on the bottom surface and at the same time filling all the trenches to protect the bottom surface and the bottom edges and corners; and

hardening the protective material to form a protection layer.

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Claim 3 (Twice Amended). A method of applying a protective coating to a bottom surface of a wafer, and of protecting bottom edges and corners of chips forming part of the wafer, which comprises the steps of:

forming trenches in a top surface of the wafer;

applying a top side dicing tape to the top surface;

grinding the wafer at a bottom surface opposite the top surface and thereby laying open the trenches;

applying a glue layer onto a mounting tape; and

mounting the wafer on the mounting tape and at the same time causing the glue to fill all the trenches to protect the bottom surface and the bottom edges and corners.

Claim 5 (Amended). A method of applying a protective coating to a bottom surface of a wafer, which comprises the following steps:

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applying a protective foil onto a mounting tape; and

mounting a bottom surface of the wafer onto the mounting tape with the protective foil facing and in contact with the bottom surface of the wafer to protect the bottom surface thereof.